



Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)		ber of sons Injured	Estimated Damage Property Crops	Character of Storm	June 1997
TEXAS, West									
Jeff Davis County 10 NW Ft Davis	01	1653CST			0	0		Hail(0.75)	
Jeff Davis County									
37 NNW Ft Davis	01	1740CST 1755CST			0	0		Hail(1.00)	
	Two multicell clusters of thunderstorms developed over the Davis Mountains and moved southward. The early report was at McDonald Observatory and the later report was along I-10 at the Cherry Creek exit.								
Jeff Davis County 7 N Valentine	04	1433CST	0.3	40	0	0		Tornado (F0)	
7 IV Valentine		1437CST					wned a brief landspou	tornado north of town	
Jeff Davis County									
Valentine	04	1445CST 1450CST			0	0		Hail(1.75)	
Presidio County 20 NNW Presidio	04	1730CST 2000CST			0	0		Flash Flood	
	Heavy		Rio Grande	filled local a	rrovos that	sent flood	I waters across State	Highway 170 upstrean	n from Presidio.
	mount		s developed	in the higher	terrain. S	urface dew		and with a moist low le	
Culberson County Pine Spgs	04	1737MST			0	0		Hail(0.75)	
Culberson County	04	17371131			v	U		Han(0.73)	
20 SSW Pine Spgs	07	1745CST 1749CST	0.8	80	0	0		Tornado (F0)	
	A tornado was reported by a rancher near the Hudspeth County line 10 miles south of U.S. Highway 62/180 in the Sierra Diablo Mountains.								
Culberson County									
Pine Spgs	07	1745CST			0	0		Hail(1.00)	
	A quite rare event with a tornado watch issued primarily for the mountains of SW Texas and Far West Texas. An upper level low located near the northern Gulf of California at daybreak was moving into the region from the southwest and helped to add mid-level support for the development of severe thunderstorms. A favorable vertical profile with SSE winds near the surface at 15-20 kt and a SW wind aloft at 40-45 kt gave a favorable shear. The storm that produced the tornado near the Hudspeth Co. line started in southwestern Hudspeth County about 20 miles west of Sierra Blanca and intensified rapidly into a supercell								
Pecos County									
Ft Stockton	08	0517CST			0	0		Hail(1.00)	
Borden County 14 NW Gail	08	0745CST			0	0		Flash Flood	
17 IVIV Gall		0930CST	on the Corr	ock	U	v		F 14511 F 100U	
Source Ct-	rivi 10	054 was flooded up	on the Capr	ock.					
Scurry County Knapp	08	0830CST			0	0		Flash Flood	





June 1997 Time Local Path Length Path Number of Estimated Persons Width Damage TEXAS, West 1030CST Heavy morning rains over the southwest part of the county flooded roads in the Knapp area. Roads 3S and 2NE of Knapp were flooded. **Scurry County** 1 N Ira 08 Flash Flood Flooding also occurred near the Ira area from the same storms that flooded the Knapp area **Scurry County** Snyder 08 0900CST 3K Flash Flood 1100CST Heavy morning rains caused widespread street flooding in the city of Snyder. A city park had flooding that caused a large whirlpool as the water flowed into a drainage grate. Flooding rose into three units of an apartment complex. **Reagan County** 4 N Stiles 08 0845CST Flash Flood 1000CST Water was running across State Highway 137, but not enough to close the roadway. Reagan County 5 SE Stiles 0855CST 1000CST Flash Flood 08 Water was running across Ranch Road 33 in the central portions of the county. **Pecos County** Ft Stockton 08 0 Hail(0.75) **Martin County** 3 N Lenorah 08 1330CST 0 0 Flash Flood 1600CST Water flowing across Highway 137 washed mud and silt across the highway. Even after the water receded the mud was so thick that Highway crews had to work through the night to clear the roadway. **Ward County** Grandfalls 1330CST 08 0 1 Lightning A 16 year old male received an indirect lightning strike. He was taken to Ward Memorial Hospital in Monahans and transferred to Odessa Medical Center for testing, and was released late that night. The boy and his mother were walking across their porch leaving the house when lightning struck a metal pipe along the side of the house. The boy was struck in the head by a glancing blow from the bolt, knocked to the ground, but sustained no burns. He was dazed but never lost consciousness; he said he remembered feeling the shock as the bolt went through his body. They said the lightning came seemingly from nowhere as all the previous thunder had seemed quite distant. Light rain was falling at the time of the incident. **Ector County** Flash Flood 1.5 N Odessa 08 1340CST O 0 Flooding over the curbs and into yards occurred near the University and Eisenhower intersection. Midland County 4 WNW Midland 08 1410CST 1500CST Flash Flood Flooding along Andrews Highway near the intersection of Bates Rd. spilled over the curb and almost entered a home Midland County 2.5 NW Midland Flash Flood 08

Torrents of water running under Golf Course Road in Midland undermined the roadway resulting in an eight foot wide collapse of





June 1997 Time Local/ Path Length Path Number of Estimated Persons Width Damage TEXAS, West the pavement into a hole. One car wrecked in the hole with the driver sustaining minor injuries. It took about two weeks for road crews to repair the road and associated drainage. **Midland County** 2 N Midland 08 1415CST Thunderstorm Wind (52) 0 60 mph winds reported by a SKYWARN spotter in Midland. **Howard County** 0 11 NE Big Spring 1430CST Flash Flood 1600CST Flooding occurred on State Highway 350. Barricades to slow traffic approaching the flooded area were posted but the highway was not closed. **Glasscock County** 13 WSW Garden City 08 1430CST Flash Flood 1730CST Highway 137 south of State Route 158 flooded from over 3 inches of rains in the area. **Glasscock County** St Lawrence 1500CST 1745CST Flash Flood 08 FM 2401 flooded from 3 inch rains in the area. **Terrell County** 1900CST 2100CST 24 NNE Sanderson Flash Flood 08 Water running across Ranch Road 2886 washed debris onto the road. **Terrell County** 34 NNE Dryden 1945CST 2100CST Flash Flood 08 Water rushing across State Highway 349 washed out a 60 foot section of pavement one mile north of Independence Creek An E-W outflow boundary in the Midland/Odessa area was a low-level focusing mechanism for convection this day, but probably the most obvious lifting feature was the impressive difluence over the area. Two lines of storms developed and moved through the Permian Basin. Precipitable water on the 00Z sounding was 194% of normal at MAF. One interesting note to this overall scene was that there was no sun in the Midland/Odessa area as stratus and statocumulus clouds filled in gaps between storms and between lines of storms. After the first line of storms moved through the central Permian Basin, the usual subsidence and rising cloud bases was not seen--instead, low scud raced to the WNW to the developing line of storms in the western Permian Basin. Late in the afternoon as the upper-level lift began to pass the region, finally the sun shined a couple of hours before sunset. The high temperature this day was only 73 degrees at MAF. **Brewster County** Lajitas 1536CST Hail(0.88) Unusually high amounts of moisture in the Big Bend region for this early in the season with dew points in the upper 50s. Thunderstorms developed over the high terrain in Mexico up the Rio Grande from Lajitas. The storms moved east and intensified with nickel size hail falling at the Lajitas Trading Post **Ector County** 10 NW Goldsmith 11 1704CST Hail(1.75) **Andrews County** 18 SW Andrews 11 1706CST Hail(1.75)

focus for this storm that dropped golfball size hail on the Andrews/Ector County line

A WNW-ESE outflow boundary between an HP Supercell near Jal, NM and the left-split storm in Andrews County served as a





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Numb Pers Killed		Estimated Damage Property Crop	June 1997 Character of Storm		
TEXAS, West										
Andrews County 1 W Andrews	11	1730CST			0	0		Hail(1.00)		
Andrews County Andrews	11	1740CST			0	0	10K	Thunderstorm Wind (52)		
	County inch h Down	A storm that rapidly developed along an outflow boundary in southern Winkler County produced a tornado as it crossed into Ector County. The storm then splitthe right-mover died, but the left-mover re-intensified moving quickly to the NNE and dropped one inch hail on Andrews. Storms from southern Lea County, NM moved east into the area and merged with the Andrews storm. Downbursting winds in Andrews were estimated at 60 mph. A houseboat was blown off its trailer, rolled over two cars, and landed on its top. The structure remain intact, but sustained much damage nonetheless.								
Gaines County										
Seminole 11 1745CST 0 0 0.50K Thunders An awning from a mobile home was blown off but sustained little damage.						Thunderstorm Wind				
	develo		it produced t	the downburs	st winds in	Seminole.		a County, NM. The storm was still in the occeded to the east-northeast it became the		
Dawson County 3 E Welch	11	1815CST			0	0		Thunderstorm Wind (61)		
Dawson County 6 NNW Lamesa	11 A larg	1822CST te tree and power	lines were dov	wned by outf	0 low winds a	0 along State	5K e Highway 137 no	Thunderstorm Wind orth of Lamesa		
Dawson County 10 NE Lamesa	11	1830CST			0	0		Thunderstorm Wind (61)		
Borden County 16 NW Gail	11	1852CST			0	0		Thunderstorm Wind (57)		
	Between about 5pm and 7pm CDT the mid-level flow veered sending storms that had been moving to the northeast now to the east Storms moving east through eastern Gaines County began to organize into a line with storms in Andrews County. As the storm continue to moved to the east into Dawson County a large scale bow formed on the line with the apex in northern Dawson County Numerous wind damage events occured as the apex of this line raced to the east at 50 mph. Wind estimates by spotters were in the 65-70 mph range.									
Upton County Mc Camey	11	1959CST 2004CST			0	0		Thunderstorm Wind (52)		
Pecos County Belding	11	2140CST			0	0		Hail(1.75)		
	The synoptic setting for this event included a surface trough located from the northeastern Texas Panhandle southwest into northern									

The synoptic setting for this event included a surface trough located from the northeastern Texas Panhandle southwest into northern Eddy County, New Mexico. Surface Moisture values were relatively high with dew points in the lower to mid 60s on both sides of the trough. Storms initially developed in the high terrain of southern New Mexico, Far West Texas, and northern Chihuahua and then formed along the trough as well. Storms began primarily as single and multicell hail producers, but in the evening became a multicell line event with damaging winds





June 1997 Time Local/ Path Length Path Number of Estimated Width Persons Damage TEXAS, West **Reeves County** 12 1755CST Pecos 0 0 Thunderstorm Wind (52) Sheriffs Office estimated 60 mph winds in the city and an anemometer recorded at 50 kt winds at the airport on the southwest side of the city. **Pecos County** 12 1813CST **Imperial** O Thunderstorm Wind (52) **Crane County** Crane 12 1900CST 0 Thunderstorm Wind (52) **Ector County** Odessa 12 1920CST Thunderstorm Wind (57) **Midland County** 3 W Midland Thunderstorm Wind 12 Two power poles located about 1 mile apart were blown down in the southwest section of Midland Dry downbursts formed in the late afternoon with surface temperatures in the Permian Basin in the upper 90s and readings in the Pecos Valley near 102 degrees. Dew point temperatures in the region were in the lower 50s. **Gaines County** 10 W Seminole 14 1440CST 10K Thunderstorm Wind **Gaines County** 2 W Seminole 1500CST 20K Thunderstorm Wind 14 A wet macroburst caused damage west of Seminole. First utility poles were knocked down ten miles west of Seminole and as the storm approached the city a cotton gin sustained had part of a roof collapse and other damage. **Ector County** 0 Gardendale 0 Hail(2.75) 14 A storm that developed over northern Ector County briefly showed supercell-type characteristics and dropped baseball hail on Gardendale. Midland County 4 NNW Midland 1540CST The Gardendale storm moved to the northeast while developing on its south end and brushed the north sections of Midland with hail slightly larger than a quarter. **Martin County** 17 WSW Stanton 14 1559CST 0 Hail(1.75) Golfball size hail fell along the Midland/Martin County line on State Highway 349. Midland County 6 N Midland 14 1559CST 0 0 Hail(1.75) **Martin County** 0 Thunderstorm Wind (52) 5 W Flower Grove 14 1610CST 0 **Martin County** Stanton 14 1639CST 0 10K Thunderstorm Wind High winds knocked down power poles in Stanton **Martin County** Stanton 14 Hail(0.75) This storm formed of the southern flank of the storm that passed over north Midland. Midland County 7 NE Greenwood Hail(1.75)

This cell over northeastern Midland County developed very rapidly on the southern flank of the Stanton storm and briefly produced





June 1997 Time Local/ Path Length Path Number of Estimated Width Persons Damage TEXAS, West golfball size hail. **Upton County** Rankin 1703CST Thunderstorm Wind (52) A 60 mph wind gust was reported as the line of storms moved through Rankin. **Howard County Big Spring** Thunderstorm Wind (57) 14 1715CST As the line of storms moved eastward, the events began to change from hail events to wind events. In the city of Big Spring 65 mph winds were reported with large tree limbs broken and light aircraft at the airport overturned **Howard County** 3 E Coahoma 1737CST Thunderstorm Wind (52) A 60 mph wind gust was estimated as the line moved east of Coahoma. **Scurry County** 1747CST 0 5K Thunderstorm Wind Snyder 14 Farther north downbursting winds knocked down utility lines in Snyder Several factors came together on this Saturday afternoon. In the upper levels the remnants from Tropical Storm Blanca passed through the area in a southwesterly flow. At the surface surface dew points were near 70 degrees over much of the region and the dry line was located just east of the mountains. The first storms were generated in the relatively dry air and formed into a NW-SE oriented line. When this line intersected the dry line, storms began to form southward along this convergent area. By 5pm CDT an almost continuous line of storms stretched across the radar screen from Lubbock to east of Ft. Stockton. By about 7:00 pm most of the storms had exited the region to the east The modified 1200 UTC MAF sounding on the SHARP workstation indicated a mean parcel buoyancy of 2900 J/kg and a best parcel buoyancy of 5200 J/kg. Presidio County 16 NW Presidio 1730CST 1740CST 8K Thunderstorm Wind 15 Strong winds damaged a new double-wide mobile home. **Presidio County** 16 NW Presidio 7K 15 1735CST 1740CST Hail(2.00) Hail larger than golfball damaged a new pickup truck parked near the trailer that was damaged by the wind **Brewster County** 20 NNW Terlingua to 15 1840CST 70K **Thunderstorm Wind** 17 N Study Butte Wind damage occurred to several buildings on a ranch located on Taurus Mesa. Much of the damage was limited to corrugated metal that was strewn across the countryside. Rear-flank downdraft (RFD) winds were thought to have been the mechanism for the high winds. The RFD then hit State Highway 118 where the Longhorn Ranch Motel sustained wind damage. A 12x20 foot sign was blown down as well as damage to doors and the roof.

The Red Cross determined that 2 houses were destroyed and 6 houses sustained major damage in the area near the motel.



Winkler County Kermit

National Weather Service Storm Data and Unusual Weather Phenomena



Thunderstorm Wind

June 1997 Time Local/ Path Length Path Number of Estimated Width Damage Persons TEXAS, West **Brewster County** 21 N Study Butte 15 1850CST 0 2 10K Hail(4.50) North of where the RFD winds caused damage, hail up to softball size smashed car windshields and pummelled a couple of houses. One gentleman, who was attempting to close a window, was injured when hail broke the window and caused several facial lacerations. He was taken by private vehicle to the Alpine Hospital. A second man suffered minor cuts on his legs **Brewster County** 17 NE Study Butte 1915CST Hail(1.75) Golfball size hail fell on the northern sections of Terlingua Ranch. **Brewster County** 13 N Panther Junction 1950CST 3K Hail(2.75) Baseball size hail broke windows in at least one car in the northern portions of Big Bend National Park on the extension of U.S. Highway 385. **Brewster County** 12 N Panther Junction 15 1950CST 0 0 Thunderstorm Wind (70) Gravel from the side of the road was blown onto the park road 11-14 miles north of the Park Headquarters. All of the gravel was 1/2 to 3/4 inch in diameter. The event was not seen but was concluded by Park officials after noting there was no silt or smaller debris which would have suggested flash flooding. During one short stretch of the road, there was an extensive amount of gravel on the road. A strong thunderstorm in southern Presidio County moved into southwestern Brewster County and became a supercell. This storm had a continuous track of damaging winds and hail for 33 miles. This track could have been longer, but in this desolate area, no other reports were available. Although there was F1 scale damage, there were no confirmed tornado sightings. Most of the significant damage was thought to have come from Rear-flank downdrafts, due to the location to the proximity of the large hail. The storm was moving to the ESE at 45-50 mph, so forward-flank downdrafts could have caused some of the damage as well due to the summation of outflow speed and translational speed. Along Highway 118 the fringe-to-fringe damage path was 8 miles wide--also suggesting large-scale outflow was a contributor to the damage. An unobstructed view from the northeast allowed people in the Midland/Odessa area to see the upper half of the storm from about 200 miles away just before sunset. The storm tower showed strong signs of rotation (in the form of large bands) even from this distance. **Terrell County** Sanderson 200K 15 2115CST 0 Thunderstorm Wind An HP supercell in the western part of Terrell County produced a bow echo on its southern flank as it approach Sanderson with the apex of the bow aimed at the town. Damaging winds rushed into town with torrential rains and mostly pea size hail. The most substantial damage was to a department store that had the roof blown off and the front wall collapse into the street. Signs were bent over, trees uprooted, and power poles broken. Also a large Texaco sign was blown down and dumpsters were overturned and pushed down alleys. It was evident from the damage that all the winds were blowing from the west or northwest

Microburst winds knocked down fences and blew a tree down in a city park.





Location	Date	Time Local/ Standard	Path Length (Miles)	Path Width (Yards)	Number Perse Killed	ons	Estimated Damage Property Crops	June 1997 Character of Storm
TEXAS, West								
Ector County 6 W Odessa	·	1754CST h wind reported b	• •		0	0		Thunderstorm Wind (52)
			•	•		•	Surface temperatur some causing dama	es in were near 104 degrees with dew ge
Martin County 2 S Stanton	20	1500CST			0	0		Hail(1.75)
Ector County 12 S Odessa	20	1535CST			0	0		Hail(1.00)
Midland County 2 NW Midland	20	1623CST			0	0		Hail(1.00)
Dawson County 14 NNE Lamesa	20 21 Heavy	1820CST 0200CST rains caused floo	oding on U.S.	Highway 87	0 that made a	0 500 yard st	tretch of the highway	Flash Flood y impassable.
Howard County 7 NE Big Spring	20	1910CST			0	0		Hail(0.75)
Scurry County 8 SSE Snyder		1943CST ading edge of a r ll size hail during		er briefly dev	0 veloped a tig	0 tht reflective	rity gradient and an	Hail(1.75) overhang. The storm briefly produced
	Storms initially developed along the dry line and moved into an unstable air mass with temperatures in the middle to upp dew points in the lower 60s. Buoyancy values were greater than 2000 J/kg.							eratures in the middle to upper 90s and
Ector County Odessa								Thunderstorm Wind off a pawn shop. Hundreds of bricks north-south thoroughfare in the city.
Brewster County 25 SSW Marathon	23 Half de	1700CST ollar size hail was	s reported at a	ranch.	0	0		Hail(1.25)
Brewster County 16 NE Study Butte		1730CST w on the south edthe next morning.	0	erstorm peeld	0 ed half the ro	0 oof off a ho	ouse. Power was kno	Thunderstorm Wind ocked out as well over a large area until
	moving lift in the but beg	g through much le the area from a de	ower dewpoin eformation zo	nts than the stone probably	orm in Winl weakened th	kler County e cap in th	y, but were able to su at region. The storm	Brewster County. These storms were ustain themselves. Mid and upper level on the western end became dominant, through the extreme northern parts Big
Winkler County 10 WNW Kermit	23	1710CST			0	0		Hail(0.75)
Brewster County Alpine	27	1800CST			0	0		Flash Flood





Time Path Path Number of Estimated Local/ Length Width Persons Damage
Location Date Standard (Miles) (Yards) Killed Injured Property Crops Character of Storm

TEXAS, West

2000CST

Heavy rains from slow-moving thunderstorms flooded the streets in Alpine. Some streets had as much as two feet of water in them

Upton County
1 SE Midkiff

28 1635CST 0 0 900K Hail(2.00)

Two-inch diameter hail destroyed about 3000 acres of cotton southeast of Midkiff.

Upton County 7 E Rankin

28 1838CST 0 0 Hail(1.00)

One inch hail fell along U.S. HIghway 67 east of Rankin.

A day of low shear but high instability and a moderate cap produced one severe thunderstorm in the region. The Initial cell developed in northern Upton County along a left-over outflow boundary from the previous night. The storm drifted over the Midkiff area where it produced large hail. The storm then moved southeast into Reagan County, went through a reorganization, then moved southwest, returning to eastern Upton County. About 10 miles north of Rankin the radar signature showed a moderate overhang. Large hail again began to fall. (The one-inch hail found along Highway 67 had fallen about 35 minutes before, and was believed to have been at least golfball size when it fell.)